

REAR DERAILLEUR - CURRENT RANGE

(since 2015)			(since 2017)	(since 2018)		



WARNING!

This technical manual is intended for use by professional mechanics.

Anyone who is not a qualified professional for bicycle assembly must not attempt to install and operate on the components independently due to the risk of carrying out incorrect operations which could cause the components to malfunction, resulting in accidents, physical injury or even death.

The actual product may differ from what is illustrated, as the specific purpose of these instructions is to explain the procedures for using the component.

1 - TECHNICAL SPECIFICATIONS

1.1 - 11s REAR DERAILLEUR TECHNICAL SPECIFICATIONS

11S REAR DERAILLEUR	CAPACITY (TEETH)	MAX SPROCKET (TEETH)	MIN SPROCKET (TEETH)	CHAINRING FRONT DIFFERENCE (TEETH)
SHORT CAGE (NOT AVAILABLE FOR CENTAUR 11)	34	29	11	16
MEDIUM CAGE	37	32	11	16

2 - COMPATIBILITY

2.1 - COMPATIBILITY OF 11S REAR DERAILLEUR

REAR DERAILLEUR 11S	CONTROLS	CHAIN
SUPER RECORD RECORD CHORUS	Ergopower Ultra - Shift 11s (CURRENT RANGE) Ergopower H11	11s (RECORD™ - CHORUS™)
POTENZA 11™	Power-Shift (POTENZA 11™)	11s (CAMPAGNOLO)
CENTAUR 11	Power-Shift (CENTAUR 11)	11s (CAMPAGNOLO)



WARNING!

Combinations other than those provided in the table may cause malfunction of the drivetrain and cause accidents, personal injury or death.

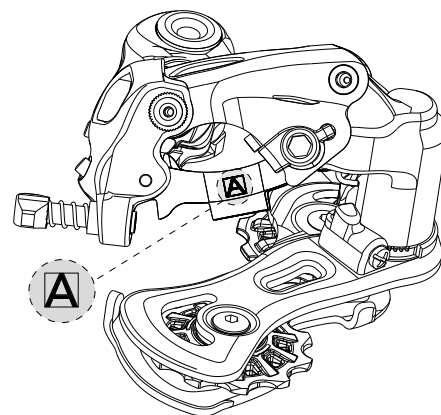
The HO (Hydraulic Optimization) marking present on rear derailleurs from the 2018 range on, indicates compatibility with through-pivot frames for the rear wheel.

⚠ WARNING! (ONLY FOR SUPER RECORD / RECORD / CHORUS REAR DERAILLEURS)

The rear derailleur is NOT designed to operate (and is therefore not compatible) with Ultra-Shift / Power-Shift Ergopower controls and Bar-End controls from the 2014 range and prior which do not bear the distinctive marking.

The use of parts which do not belong to this range may significantly reduce the overall performance of the drivetrain, therefore we recommend not mixing parts from the old ranges with those from the new.

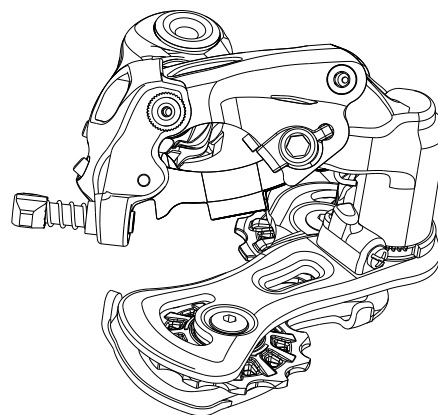
In order to help you and to enhance performance, Campagnolo has introduced a distinctive mark (a boxed letter as illustrated here) on the new Super Record, Record and Chorus unit parts in order to point out their compatibility. Therefore, please ensure that the letter in the parts that operate for shifting and in the parts that operate for derailings correspond.



⚠ WARNING! (ONLY FOR POTENZA 11™ REAR DERAILLEURS)

The Potenza 11™ rear derailleur is NOT designed to function with (and is therefore not compatible with) Ergopower Ultra-Shift / Power-Shift commands from other drivetrains and Bar-End commands not marked by the letter B.

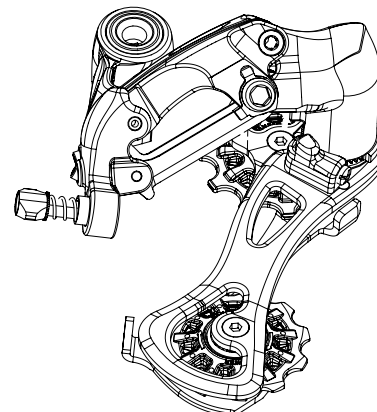
The use of components that do not belong to this drivetrain may significantly reduce the overall performance of the drivetrain and it is therefore advisable not to use components that do not belong to this drivetrain.



⚠ WARNING! (ONLY FOR CENTAUR 11 REAR DERAILLEURS)

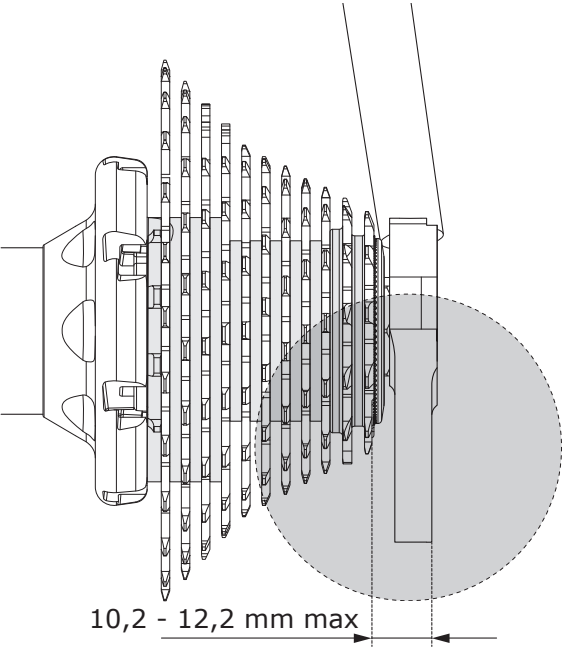
The Centaur rear derailleur is designed to function exclusively (and is therefore compatible) with Ergopower Power-Shift commands marked with the letter D.

The use of components that do not belong to this drivetrain may significantly reduce the overall performance of the drivetrain and it is therefore advisable not to use components that do not belong to this drivetrain.



3 - INTERFACE WITH THE FRAME

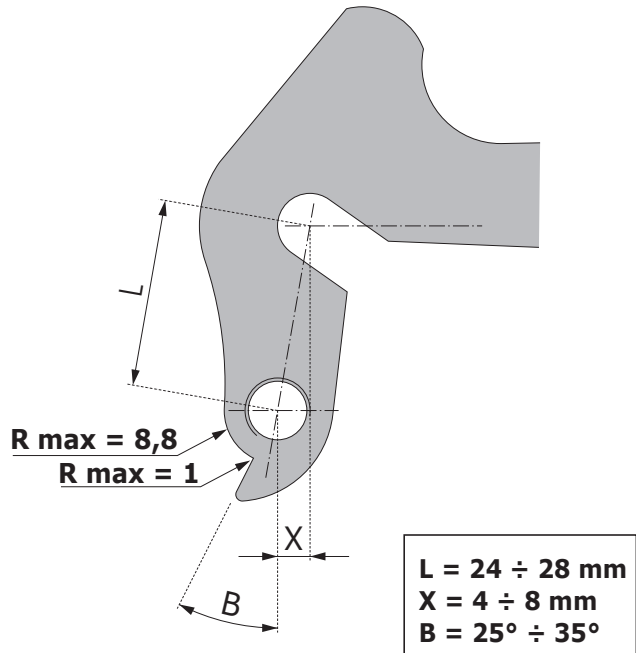
3.1 - DROP-OUT SPECIFICATIONS



10,2 - 12,2 mm max

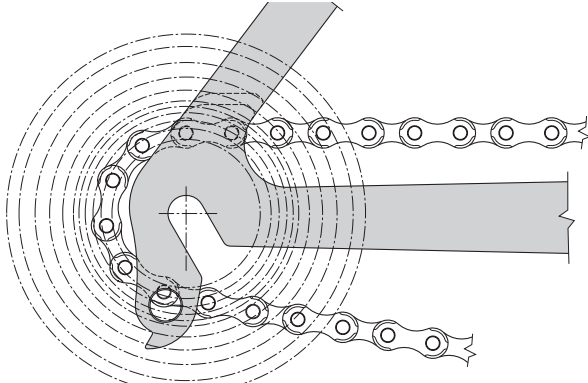
1

The stroke of the cage in relation to the cable throw is checked by Campagnolo Quality Control for each single piece produced. The distance of the rear derailleur hanger from the first sprocket influences this stroke, so it is indispensable to stay within the tolerance prescribed as per the drawing (Fig. 1).

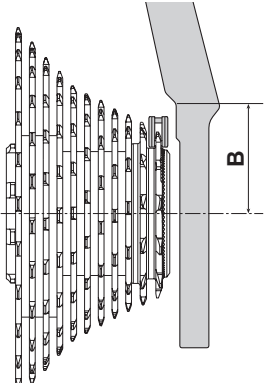


2

! ATTENTION!
Campagnolo® rear derailleurs are designed to work with dropouts that have the dimensions shown in Fig. 2. For your safety and for the performance of the drivetrain please make sure that the dropout of your bicycle has those dimensions. If you have any doubts please have a qualified mechanic inspect your bike before using it.
Drop-outs outside these specifications can lead to a serious loss of performance.



3



B

N° TEETH	B (Fig. 3)
Z 11	30 mm
Z 12	30 mm
Z 13	32 mm

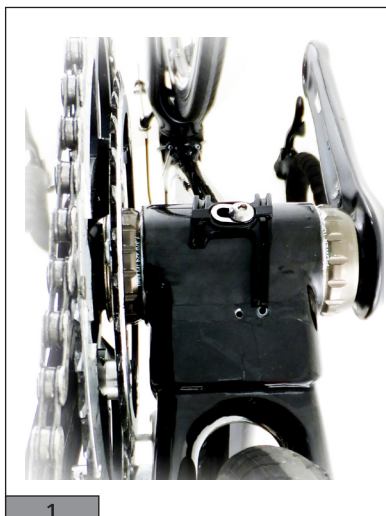
4 - ASSEMBLY

4.1 - PREPARING THE FRAME

- Check that the Campagnolo® plate (Fig. 1) is fitted under the bottom bracket shell.

Different plates can also give rise to a serious loss of performance.

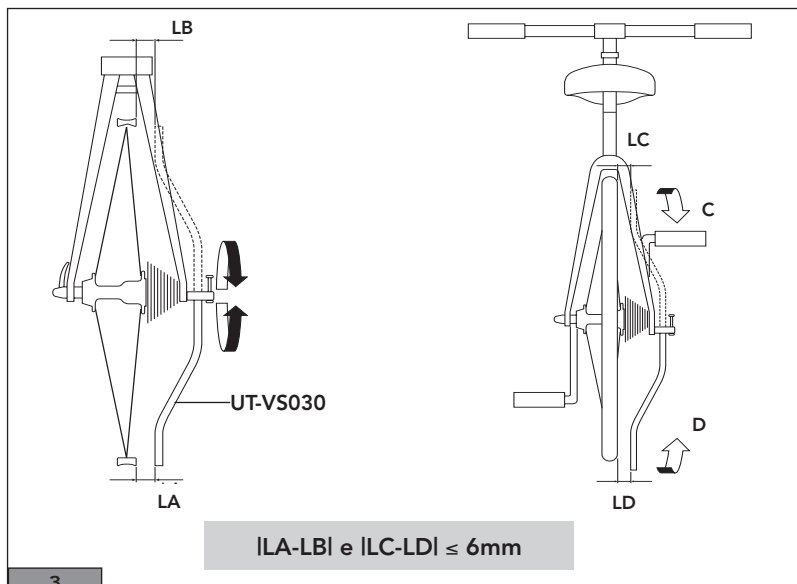
- Chase the threads of the rear derailleur hanger (B - Fig. 2) using a tool tap with threading 10x26 TPI.



CAUTION

Check and, if necessary, realign the rear derailleur dropout only by using Campagnolo® tool UT-VS030 (Fig. 3).

NEVER straighten the dropout with the rear derailleur assembled because you could damage the dropout and cause irreparable damage or loss in functionality to your rear derailleur.



4.2 - REAR DERAILLEUR ASSEMBLY AND ADJUSTMENT

- Secure the rear derailleur to the frame using screw (A - Fig. 4), and tighten with a TORX T-25.

Tightening torque: 10-12 Nm (89-106 in.lbs).

- Carry out this adjustment with the chain on the smallest cassette sprocket and with the Ergopower control button zero-ed (Fig. 5).

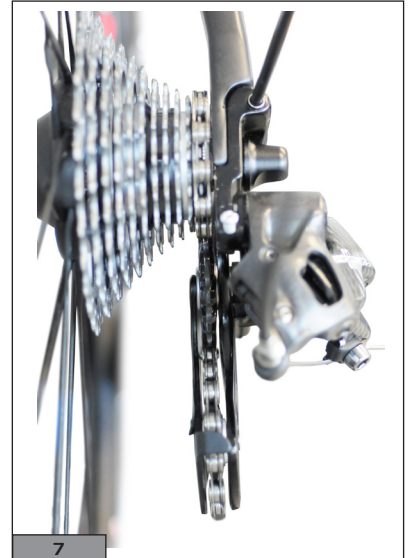
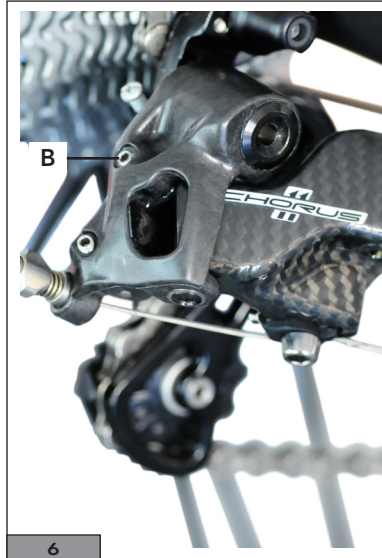


- Turn the screw (B - Fig. 6) until perfect alignment is obtained between the centreline of the top roller and the axis of the first sprocket (Fig. 7).

- Check the length and, if necessary, shorten the casing. Take care to cut it straight across without altering the configuration of the casing and without damaging the cable in any way.

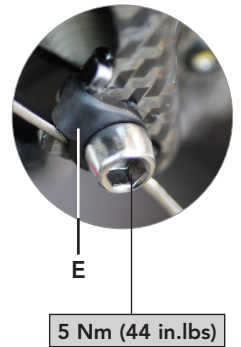
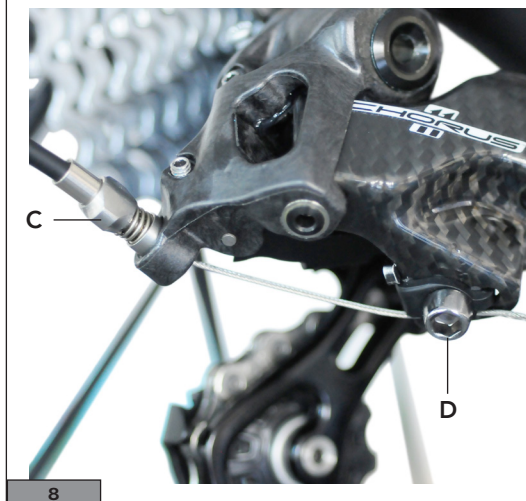
If the cable is damaged, please replace it before riding your bicycle. If the casing is too short, rear derailleur operation will be affected.

Cables and casings do not require lubrication since they are supplied already lubricated.



- Pass the cable through the adjustment screw (C - Fig. 8) and insert the end of the housing; then pass the cable underneath the plate (E - Fig. 8) and clamp it by tightening the Allen screw (D - Fig. 8) at a tightening torque of **5 Nm - (44 in.lbs)**.

- Cut the excess cable at about two cm. from the clamping screw and protect the end with a cable cap.



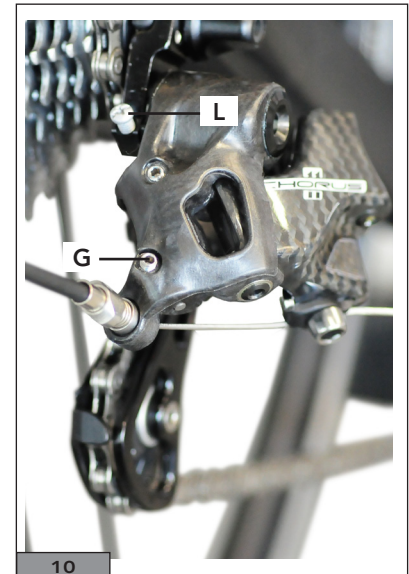
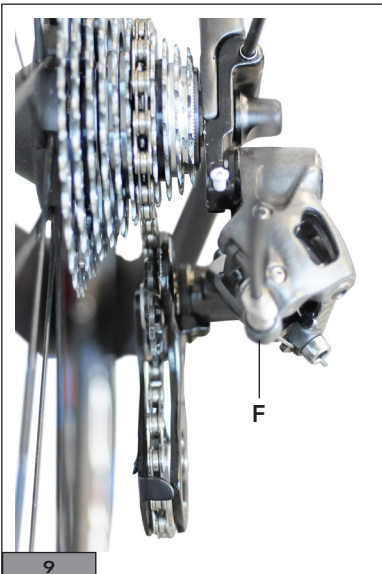
5 Nm (44 in.lbs)

- Make sure that the screw (G - Fig. 10) is correctly adjusted: by operating the gear lever with the chain on the largest sprocket, the inner plate of the derailleur cage must **NOT** come into contact with the spokes.

- Position the chain on the 5TH sprocket counting from the smallest.

- Turn the cable tension adjuster (F - Fig. 9) until perfect alignment is obtained between the centreline of the top roller and the centreline of the 5TH sprocket.

- If centering between the centrelines of the roller and the fourth sprocket is not correct, turn the adjuster (F - Fig. 9) counterclockwise to shift the rear derailleur inwards. Turn clockwise to shift the rear derailleur outwards.



- Check that when the shifter is actuated accordingly, the rear derailleur positions the chain on the largest sprocket; if this does not occur, turn the screw (G - Fig. 10) repeatedly (slackening it until the chain is positioned on the largest sprocket without overshifting).

- Make sure that all gear ratios work perfectly.

- With the chain on the smallest chainring, adjust the screw (H – Fig. 12) until positioning the rocker as shown in Fig. 13.

If you are unable to observe the correct distance or if, once the chain is positioned on a smaller chainring and smaller sprocket, the chain is not taut enough, act on the screw (L - Fig. 10).

If necessary, act on the screw H (Fig. 12) again to observe the indicated specifications (Fig. 13).

Note

In the limit combination, sprocket cassette 11-23 and particularly long drop-out rear derailleur hanger (28 mm), it is normal that the distance cannot be adjusted to less than 7 mm.

IMPORTANT!

If you have a frame with internal cable runs, also ensure that there is no contact between the rear and front derailleur cables. If necessary, completely loosen the front derailleur cable, checking rear derailleur operation in these conditions.

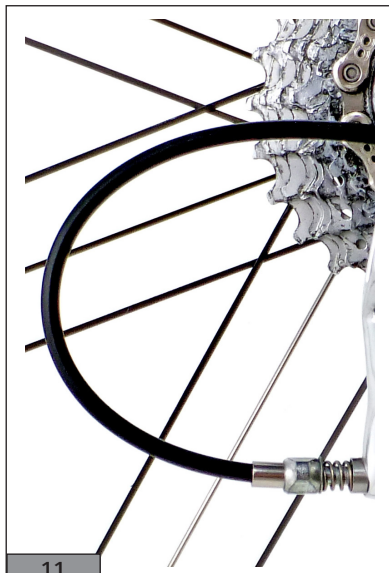


ATTENTION!

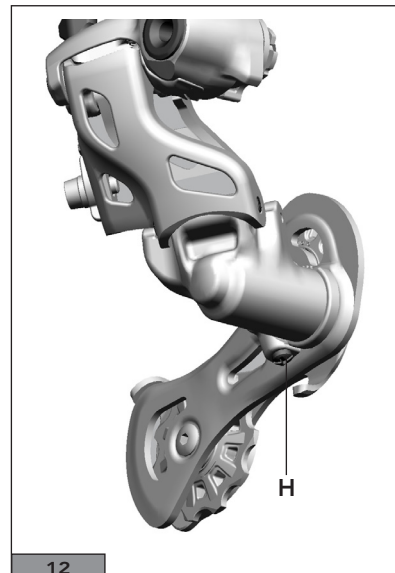
Derailleur adjustments must be performed by skilled personnel: a badly adjusted derailleur can result in an accident, personal injury or death.

ATTENTION

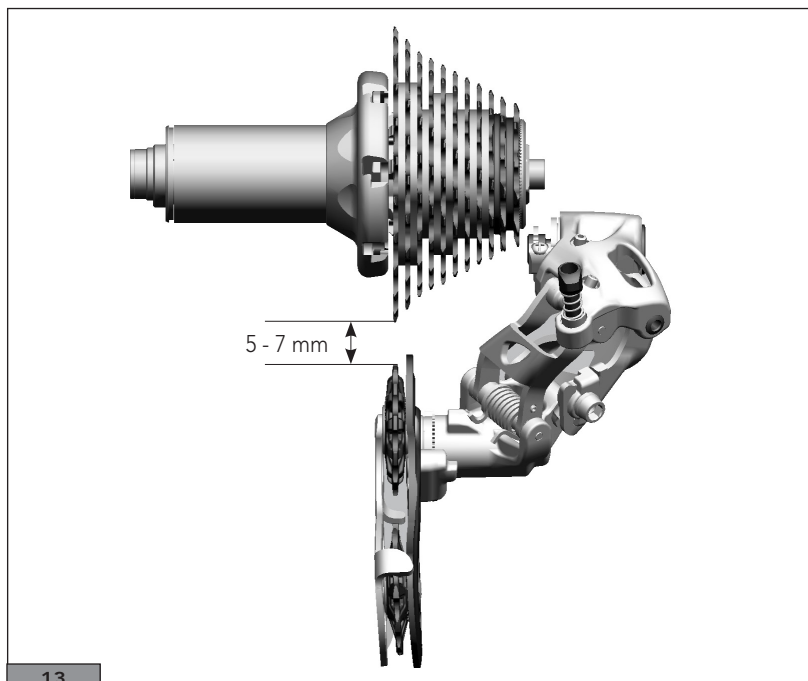
Use ONLY original Campagnolo housing end (internal diameter 4.3 mm - Fig. 11). Check that no abnormal folds have been created by forcing the cable.



11



12



13

5 - MAINTENANCE

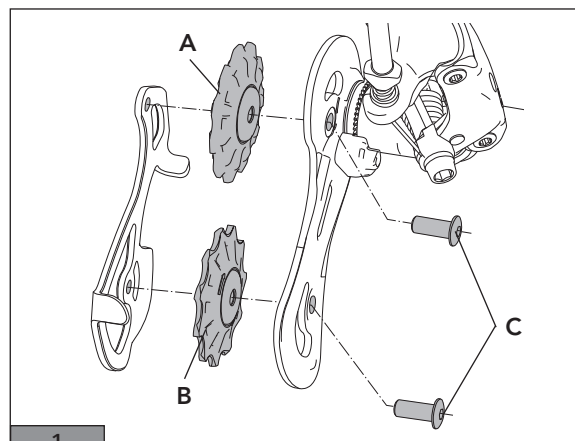
- Lubricate all the joints regularly.
- If the rollers do not rotate smoothly, clean thoroughly and replace if necessary.
- To remove the rollers, unscrew the screws (C - Fig. 1) with a 3 mm Allen screw.

WARNING!

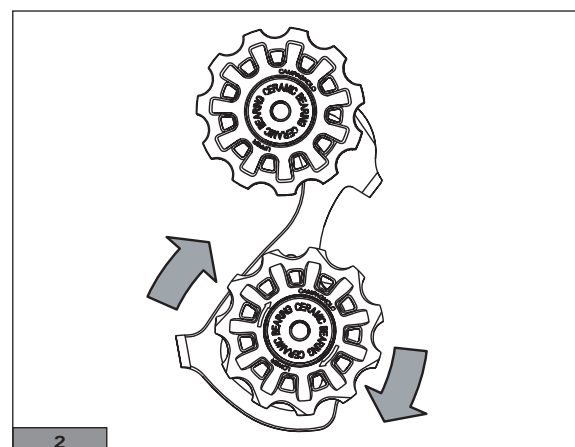
The two rollers are different: on the upper section, fit the roller (A - Fig. 1) marked "UPPER" (with side play); in the lower section, fit the roller (B - Fig. 1) marked "LOWER": it is unidirectional and must be fitted so that it rotates in the direction indicated by the arrows (Fig. 2).

WARNING!

Comply with the following specifications when replacing the pulleys:



1



2

TIGHTENING TORQUE

11s: 2,7 Nm (24 in.lbs)

- The life of the components depends on conditions of use and on the frequency and quality of maintenance. To keep the components in good condition, cleaning and lubrication must therefore be repeated frequently, especially if it is subjected to heavy-duty use (i.e. after washing your bicycle, after every ride in wet, dusty or muddy conditions etc.).
- Dirt seriously damage bicycles and their components. Thoroughly rinse, clean and dry your bike after using it in these conditions.
- Never spray your bicycle with water under pressure. Pressurized water, even from the nozzle of a small garden hose, can pass seals and enter into your Campagnolo® components, damaging them beyond repair. Wash your bicycle and Campagnolo® components by wiping them down with water and neutral soap. Dry them using a soft cloth. Never use abrasive or metal pads.
- Before lubricating, thoroughly clean the drive system (chain, sprocket set, chainrings and derailleur pulleys) with a brush or cloth saturated with an appropriate degreaser or detergent.
- Relubricate the components carefully using a lubricant suitable to purpose.
- Using poor-quality or incorrect lubricant may damage the chain and cause excessive wear or damage to the system. A damaged drive system can malfunction, resulting in an accident, personal injury or death.
- After applying the lubricant move the cranks and engage all possible gear combinations in order to thoroughly lubricate the entire drive system.
- Thoroughly clean any residual lubricant from the bicycle and floor.
- At the end of the lubrication operation, CAREFULLY degrease rims and brake pads.



WARNING!

Traces of lubricant on the rims and brake pads can reduce or eliminate the braking capabilities of your bicycle, resulting in an accident, personal injury or death.

6 - PERIODIC MAINTENANCE TABLE

Maintenance intervals are strictly approximate and may vary significantly in relation to the intensity and conditions of use (for example: competitions, rain, winter roads with salt, weight of the athlete, etc.). Schedule the appropriate maintenance with your mechanic.

PROCEDURE	MILEAGE IN KM (MAX)	TIME (MAX)	METHOD FOR CHECKING
check screws are tightened to the correct torque	2000	2 months	torque wrench
Lubricate the axles regularly	6000	6 months	
check alignment frame drop-out	2000	2 months	rear derailleur hanger alignment tool UT-VS030
wheel cleaning	500	1 month	
replacement if necessary wheels	2000	2 months	